

78°17'30"

78°15'

78°12'30"

78°10'

POTENIOMETRIC SURFACE

By

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EXPLANATION

POTENIOMETRIC CONTOUR - Shows approximate altitude at which water would stand in tightly cased wells. Contour interval 10 feet. National Geodetic Vertical Datum of 1929. Arrows indicate direction of groundwater flow.

AQUIFER BOUNDARY—dashed where full extent of aquifer is not shown; aquifer extends up some small valleys and up and down valley of principal stream.

MAJOR INFLOW TO AQUIFER - surface and groundwater flow along main valleys beyond extent of mapped aquifer.

MAJOR OUTFLOW FROM AQUIFER - surface and groundwater flow along main valleys beyond extent of mapped aquifer.

COMMUNITY WATER SYSTEM WELL OR INDUSTRIAL WELL - numbers are based upon latitude and longitude, after LaSala (1968)

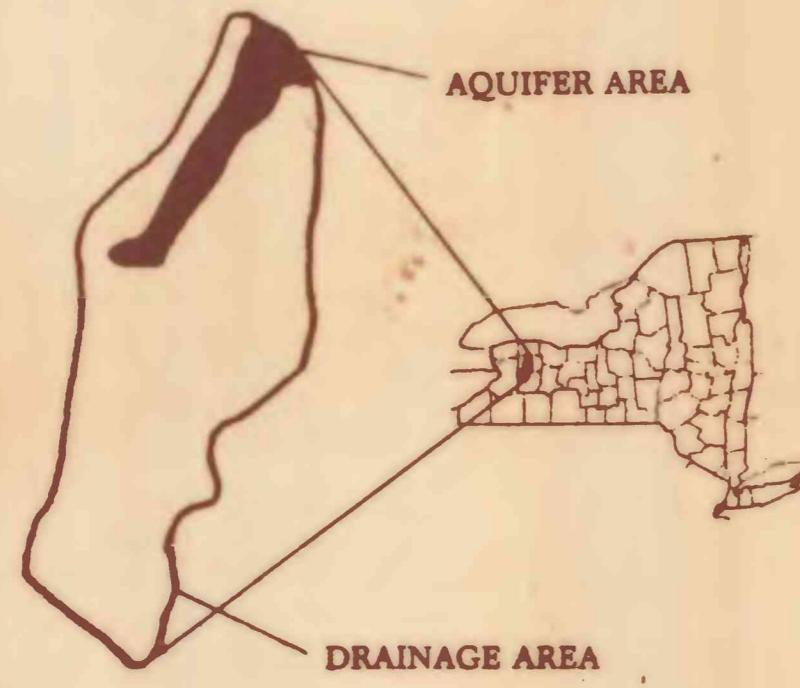
DATA POINT

NOTE

The contours represent the estimated average altitude of the water table in the aquifer based on surface water levels and water levels measured in wells during the 1950's and 1960's (LaSala, 1968). Because valley aquifers are the discharge point for regional ground-water flow and thus do not have a great annual fluctuation, because there is no extensive pumping in the valley, and in addition long-term observation well maintained by the U.S. Geological Survey shows no long-term changes, the use of old water-level data is warranted to portray the probable water-table. The water table fluctuates seasonally in response to changing recharge and discharge. Recharge occurs generally over the entire aquifer wherever the land surface is permeable (see sheet 3, "Infiltration potential of soil zone"). Discharge occurs principally as inflow to streams and as pumpage from wells. Heavy pumping from wells near streams can induce recharge from the stream.

REFERENCE

LaSala, A. M., 1968, Ground Water Resources of the Erie-Niagara Basin, New York, New York State Conservation Dept., Basin Planning Report ENB-3, 114 p.



GEOHYDROLOGY OF THE GLACIAL-OUTWASH AQUIFER IN THE BATAVIA AREA, TONAWANDA CREEK, GENESEE COUNTY, NEW YORK

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